Highlights inside this issue

- **Create for the Army a warfighter that understood simulation**

- **using simulations in an operational context to support operational needs**

- **The FA57 officer's roots and mission are operations first, simulationist second**
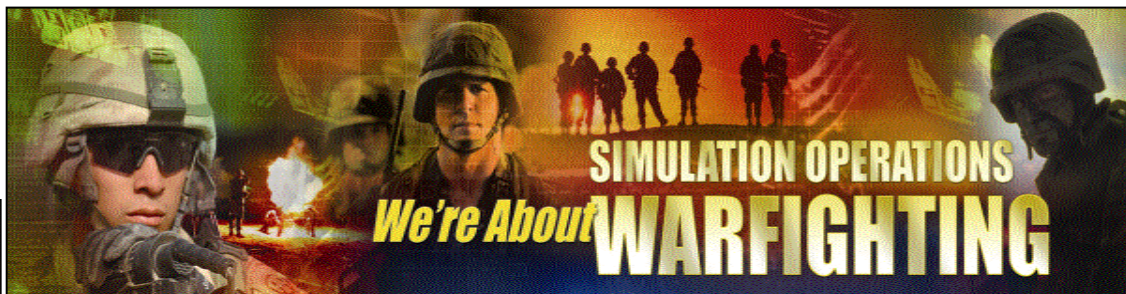
Simulation Operations Quarterly

From the Desk of the Proponent—W.H. (Dell) Lunceford, Jr.

As the Proponent for Simulation Operations (FA57), not a day goes by where I am not reminded about the importance of the word 'operations' in our name. There are many outside our community that think of the FA57 as a Simulationist and even though the community is recognized for their combined operations and simulation experiences, few fully understand the implications of adding the term Operations to Simulation. As our Army is today at war and continuing to transform, we must continue to remind ourselves of that on occasion!

In my mind, the operations part of the job relates to (at least) two components, one equates "operational" with "warfighter." It is clear that GEN Shinseki had this in mind when he created the concept of the FA57 back at a time when no one thought about M&S much, let alone as

a mission critical skill. His vision was to create for the Army a warfighter that understood simulation well enough that he could lead the Army through an era he knew was coming – a need for critical reliance on simulation. Operational also defines the simulation job; it is about using simulations in an operational context to support operational needs. Warfighters working with warfighters, one in the same. The challenge we face is how to keep the FA57 both operationally relevant, as well as simulation savvy. This was a 'robust' discussion topic with the previous Chief for a good 18 months. The perfect world would have had the FA57 as part of the operations career field along with infantry, armor, artillery, etc. But the practicality of OPMSIII is that FA57 resides in the Information Operations career field. That, however, DOES NOT

change our focus. The FA57 officer's roots and mission are operations first, simulationist second.   It is no mistake that 50% of the active Army FA57 community are assigned to TOE or TDA COCOM positions. It is no mistake that we have a number of FA57s as part of OIF/OEF. They are not there as observers or part of lessons learned teams, they are there as valuable, deployed members of their units.

As we all know, the Army and DoD are transforming and the FA57 community is no different. Some of the changes are driven by operational needs, some by technology. As an FA57, one of your original missions is to help the Army become comfortable with the shift to more simulation use in training and to assist the Army in creating future generations of training simulation systems.

Simulation Operations Professional Courses

The Proponent Office developed the Simulations Operations Professional Courses, which consists of three one-week courses (40 hours per week) to support civilian simulation professional educational development. The three one week courses are: (1) Fundamentals of M&S Program Management, (2) Technical

Aspects of Simulations, and (3) Employing Simulations. The pilot course will be offered at the Korea Battle Simulation Center in December 2003. The schedule of future offerings of the Simulations Operations Professional Course is being developed. This course is designed to become part of the educational foundation of

the Simulation Operations Career Program (CP36).

Anyone who would like more information should contact Tom Lineer, thomas. lineer@hqda.army.mil, DSN 664-0258, or COM 703-604-0258.

- Dr. Thomas Lineer
Civilian Programs

Simulation Operations Proponent Division Update

"Every day the Proponent Office, in conjunction with the Army Staff and MACOMs, works incredibly hard to create and sustain the right environments for the Functional Area and the Simulation Operations Community. Unimpeded and fully supported, this exceptional community of military, civilian, and contractor personnel continues to excel and perform the critically important Army missions of today and build the
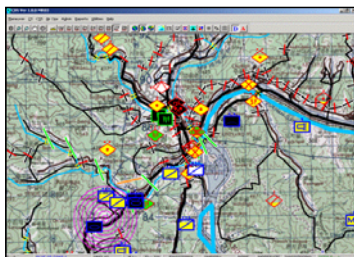
The first issue of the Simulation Operations Quarterly marks a significant milestone in where we are in Simulation Operations. A year ago the Simulation Proponent Division was established to manage all life cycle functions for the simulation operations military and civilian community. Proponent Division personnel include the Proponent Manager, Proponent Officer, Force Readiness Officer, Development Program Manager, Training Specialist, Acquisition and Sustainment Manager, Force Structure Manager, Civilian Program Manager, and Simulation Operations Course Instructors. Located within the Deputy Chief of Staff, G3, we have tremendous capability, enthusiasm, and support to accomplish the many challenges facing the Army today and in the future. Every day the Proponent Office, in conjunction with the Army Staff and MACOMs, works incredibly hard to create and sustain the right environments for the Functional Area and the Simulation Operations Community. Unimpeded and fully supported, this exceptional community of military, civilian, and contractor personnel continues to excel and perform the critically important Army missions of today and build the bridge to the future.

We, as a community, have had many successes this year. I will mention a few that have had significant impacts to Simulation Operations. In January 03, the Army was finalizing its position to the Office of the Secretary of Defense (OSD) on

the Third Wave for military/civilian to commercial conversions. To put it in its simplest terms, the Army was looking at the feasibility of converting any military job that did not involve firing a weapon to the civilian/commercial sector.

All Functional Areas were under intense scrutiny and slotted for commercial or civilian conversions. OSD was evaluating over 200,000 military and civilian positions. On 31 January 03, we were given the opportunity by the Office of the Assistant Secretary of the Army for Manpower and Reserve Affairs (ASA (M&RA)) to discuss the roles, missions, qualifications, and purpose of FA 57 Officers in today's and tomorrow's Army. On 11 February 03, the ASA (M&RA) provided written guidance that FA 57s were exempt from the Third Wave.

In March 03, based on the Chief of Staff, Army approval, the Army G3 directed the FY05 recoding of 191 basic branch and branch immaterial positions across the Army, predominantly Assistant S3s in EAD/EAC Brigades, to FA 57. We also gained approval to designate another 186 positions in FY05, S3s and Assistant S3s in F-edition TOE digital, heavy Divisions (1CAV and 4ID(M)) and Stryker Brigade Combat Teams with a S7 FA 57 Skill Identifier (SI).

Due to your operational success, we continue to work extremely hard to fill the exponential increases in requests for FA 57 Officers in Army and Joint assignments. We have completely redesigned our FA 57 Qualification Course, added

a Distance Learning Module, developed three one-week Simulation Operations Professional Courses, published a Simulation Operations Handbook, fielded an After Action Review Tool Kit, have 15 officers currently in Advanced Civil Schooling, been approved for FA 57s to do right seat rides at the National Training Center, completed a new FA 57 Recruitment Video, obtained permission to attend the School for Advanced Military Studies, and have been actively working Officer Education in the Intermediate Level Education/Advanced Officer Warfighting Course. We have also completed a CONUS/OCONUS Simulation Operations Study to establish a Civilian Program which is being considered by ASA (M&RA) for approval.

We look forward to seeing you at the Education Panel and Executive Council, 3-4 December in Orlando, FL, where we will also unveil our completely redesigned booth and products at the I/ITSEC. Please join us there. Special thanks to all those FA 57's and Simulation Operations personnel who participated in the most recent LVCTEPR and FORSCOM Conference. Simulation Operations personnel are more than ever coming together as a community. This quarterly will continue to assist our community in understanding where we have been, what we are currently doing, and where we are going.

- Mr. Roger Samuels

Sim Opns Proponent Mgr

Training Capabilities Analysis of Alternatives Study

The Training Capabilities Analysis of Alternatives Study was formally initiated with a 4 star Senior Steering Group Kick Off meeting on 3 November 2003. Co-chaired by the Under Secretary of Defense for Policy and Readiness and the Commander, USJFCOM, the Training Capabilities Analysis of Alternatives will identify cost-effective methods for accomplishing Joint and Service Training, to include modeling and simulation capabilities that were to be met by the terminated Joint Simulation System (JSIMS). The Army is represented on the Senior Steering Group by the Vice Chief of Staff of the Army, with the Army G3 as his alternate.

The study team is organized into 3 panels: Training, Technology, and Cost. These panels include OSD, Defense Agency, Service, and Combatant Command representatives who will do the "heavy lifting" of the study. The study team will also conduct a series of business games and Senior Steering Group meetings at key decision points during the study. This gaming strategy will facilitate Senior Leader, Industry, and Academia input on the methodology, alternatives, approaches to achieving the alternatives, and the study outcome. The study timeline is shown to the right.

As part of the Training Panel activities, U.S. Joint Forces Command hosted a meeting of the Joint Training Review Group on 19-20 Nov 2003.

The purpose of the meeting was to collect M&S training requirements, shortfalls, and issues from the Services and Combatant Commands. The following Army FA57 officers represented the Army's position in Modeling and Simulation: LTC Scott Fellows (STRATCOM), LTC Andy Sargent (JFCOM), LTC John Lucynski (National Simulation Center), LTC Steve Seitz (EUCOM) and MAJ Mark Tanner (PACOM).

Information on the Joint Training Review Group and the Training Capabilities AoA is available on the JFCOM J7 website, http://www.jwfc.usjfcom.mil.

-Leslie Winters, Dep Div Ch
-Herb Champion, Jt/Def Rep

Timeline

△ Business games   ▲ Senior Steering Group meetings
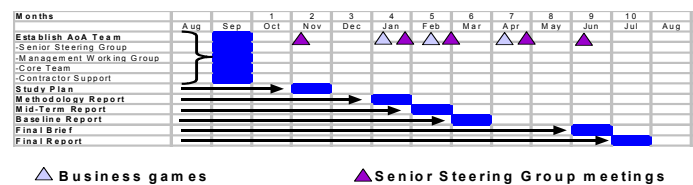
Con't from page 1—FA 57 Meeting Current Challenges, Looking to the Future

Today's Army is moving to a tightly coupled planning/COAA/mission rehearsal environment, one where it is very hard to separate the planning mission and the planning tools from the training/mission rehearsal mission and its tools. It is an environment where operations, applications, tools, and technology are merging. We also see this change in the practical missions many FA57 officers are taking on today. The Simulation Operations officer is becoming the expert in understanding and applying battle command and the associated technology. In truth, this combination of operational officer, simulationist, and expert at battle command is the model of the modern officer in a network centric Army.

The bottom line is that the FA57 officer is not only meeting the current Army vision, but is also looking forward to enable the future force vision. It is a robust community of very dedicated officers, a community whose job description is continuing to mature and to adapt to the modern Army, while staying true to its roots. Three years ago this was a community of about 50 officers, half of which were malassigned. The FY05 Command Plan shows an Active/Reserve community of 400, has a Skill Identifier (S7) that will be required for many of the Army's leading BN/BDE commands, and is the envy of our service counterparts. As the Proponent, my objective is to make sure there isn't a better career field in the Army, but all

we can do is create an environment. Your job is to keep doing what you have been doing so well. The growth and acceptance of the FA57 career field would never have happened if the job you have been doing had not created the buzz. To say that I am personally proud to be associated with the FA57 community would be an understatement. It has been an honor to be part of your leadership and it will be exciting to watch this community mature over the near future. Send me mail; tell me what is right and what needs to be fixed. Without feedback, we may begin to think the world is too perfect. As a reminder of our operational focus, I would like to give special recognition to our FA57 officers that have de-

ployed or are scheduled to deploy as part of OEF/OIF. We are all indebted to you for the sacrifice you have made for the Army and our Nation.

    - W.H. (Dell) Lunceford, Jr.
    FA57 Personnel Proponent

Simulation Operations Course (SOC)

The Simulation Operations Proponent has completed a year and half effort on the revision of the Simulation Operations Course (SOC). Designed for mid-career Army officers selected for the Simulation Operations functional area (Functional Area 57) and selected GS employees, this six-week course provides students with an understanding of the roles, responsibilities, practices, procedures, and concepts necessary to integrate models and simulations into the organizational environment. A complete instructional redesign of the course was the first step in the revision process. The Simulation Operations Proponent Office designed the SOC's curriculum to present the students with knowledge in a sequence that mirrors activities in the realm of simulation operations, beginning with the creation of models and simulations and ending with evaluation of their effectiveness. This approach enables a modular curriculum that can be readily expanded and modified to satisfy emerging educational requirements. The approach also facilitates incorporating the entire SOC into other professional military education programs, or elements of the SOC into other existing courses. The course content now provides a range of information and activities to include military modeling and simulation (M&S) case studies, hands-on practical exercises, and associated lab experiences. Based on a formal evaluation conducted during the revision phase and comments from FA57s from the field, seven hundred changes and modifications were made to the course. The next class of the SOC will be conducted in January 2004, at Ft. Belvoir, VA, with subsequent classes scheduled every six months. The course is designed to fulfill the vision of creating "…a trainer who is equally adept as an operator and a simulationist."

> \- Dr. Edward Degnan
> Proponent Education
> Development Mgr

Questions on Simulation Operations Course

> **The SOC is creating "…a trainer who is equally adept as an operator and a simulationist."**

How do I register for the Simulation Operations Course (SOC)?
Registering is a two-step process for everyone except active duty officers going TDY enroute to the course. First, send an email to Proponent Office at the following address: deganej@hqda.army.mil informing us you will attend the course. Second, contact your Army Training Requirements and Resources System (ATRRS) for input into the reservation system. School code: 701, Course: 2G-F57 (CT), Title: Simulation Operations Qualification. For active duty officers going TDY enroute, your ATRRS entry is accomplished by the FA 57 Career Manager at the U.S. Army Human Resources Command (HRC) (MAJ Brian Bedell).

When are the FY 04 Simulation Operations Courses?
Two classes are scheduled:
1st Class: 5 Jan - 13 Feb 04
2nd Class: 14 Jun - 23 Jul 04

What are the learning activities I must accomplish prior to attending the Simulation Operations Course?
Prior to attending the course you must read "Introduction to Military Training Simulation: A Guide for Discrete Event Simulationists," "Simulation, The Second Training Revolution," FM 1--The Army, and FM 3-0--Operations. After reading these 4 assignments you will write a three- to four-page paper explaining your views on the articles and FMs and how they apply to your present/previous/future duty position.
During the first day of the class you will turn in your paper for grading.
Located on the Simulation Operations Course web page (https://www.fa-57.army.mil/index-2.htm) are the hyperlinks to the articles along with other information.

> \- Mr. Gary Dahl
> Education Courses Mgr

Academic Institution – University of AH

New opportunities to learn from some of the finest modeling and simulation experts in the industry are now available in the Huntsville, Alabama area. The rapid evolution of the modeling and simulation discipline is also presenting rapidly evolving needs for professional credentials and career-building competencies. To begin answering these needs, the University of Alabama in Huntsville (UAH), Professional Development, is offering the new **Modeling And Simulation Certificate Program**, a series of seven courses designed to develop an understanding of models and simulations across a spectrum of professions. To best support the advancement of the modeling and simulation pro-

fession, and provide the thorough, high-level training needed by the M&S community, UAH Professional Development formed an expert advisory committee, composed of senior managers and M&S practitioners from the U.S. Army Research, Development and Engineering Command (RDECOM), U.S. Army Space and Missile Defense Command (SMDC), and private industry to guide program development. As designed by the committee, the program content provides a conceptual understanding of the application of modeling and simulation to problem solving, design, and production and operational issues, as well as management application in both government and private sectors. For complete course

descriptions and schedules, visit the UAH Professional Development web site at www. coned.uah.edu, or call the PD office at 824-6372 (1-800-448-4035).

> - Dr. Edward Degnan
> Proponent Education
> Development Mgr

FA 57 After Action Review Toolkit

The United States Army is at war, and will be heavily committed in the Global War on Terror for the foreseeable future. Perhaps there's no better time for the **AAR Toolkit**, because as the old maxim goes, we "fight like we train."

So as we train, and as we rehearse and conduct our wartime missions throughout the world, we take with us those same processes and techniques that brought our Army to the level of readiness that they take to their missions every day. There's probably no better time to use after action reviews (AAR) than in wartime, when learning what really happened in an operation, determining what can be improved or sus-

tained, and fixing responsibility for the changes can literally save lives. Because as we can always improve, and our adversaries never stand still.

Since warfighting is our business, we have developed a toolkit to assist you with understanding the AAR process. The **AAR Toolkit**, is a comprehensive DVD-delivered training and military education tool for all FA57's, Army leaders and trainers at nearly all echelons and levels of experience. The FA-57 proponent will distribute copies beginning in late November. Any Army unit, leader or trainer may request copies by contacting us at sim-ops@hqda.army.mil. A multi-disc CD-ROM set will

follow at year's end.

> - MAJ Favio Lopez
> Proponent Officer

There is no better time to use an AAR process than in wartime.

AAR Toolkit — a comprehensive DVD-delivered training and military education tool

Using JCATS for Warfighting—USAREUR

Many senior government leaders and military planners thought that the most difficult fighting during Operation Iraqi Freedom would occur in the city of Baghdad. Fortunately, the powerful coalition forces were able to demoralize and defeat the will of the Iraqi forces prior to entering Baghdad and there was very limited fighting inside the city itself. Had a prolonged and fierce battle occurred inside Baghdad, the 1st Armored Division (1AD) would have been more than adequately prepared for operations in this complex urban environment thanks to their training using constructive and virtual simulations.

To prepare for urban warfare, the 1AD conducted a series of training events designed to educate and train leaders on the complexity of urban operations with the city of Baghdad as the backdrop. Initially, the division was tasked by the V Corps Commander to develop tactics, techniques and procedures (TTPs) that could then be exported as a training package to various units within the Corps. An "Urban Seminar" was the event that 1AD used to develop the TTPs.

The initial Urban Seminar was executed at the United States Army Europe (USAREUR) Battle Command Training Center (UBCTC) in Grafenwoehr, Germany in February 2003. This event was so successful that results of the seminar were translated into actual TTPs that were used by V Corps during Operation Iraqi Freedom.

In a video teleconference briefing from Baghdad, Lt. Gen. William S. Wallace, the Commander of V Corps, discussed his concept for the Urban Seminar. "Before I deployed the Corps from Germany, I had some of the troops from the 1st Armored Division, as a matter of fact, do some simulation work with a simulation called JCATS, which is a very high resolution simulation that can be used to simulate urban combat. And what they investigated over the course of five days was possible ways to conduct urban combat with armored formations. And one of the techniques the investigated was the idea of doing armored raids into urban areas."

The mission of executing this 1AD training event fell on the shoulders of the 7th Army Training Command's (ATC) Directorate of Simulations (DOS).   The DOS immediately determined the requirements necessary for successful mission accomplishment: a high fidelity terrain database, a skilled and trained Opposing Force (OPFOR), simulation operators, appropriate facilities and an After Action Review (AAR) tool. It just so happened that the DOS, in concert with USAREUR's Warrior Preparation Center, had all the assets necessary to assist 1AD in meeting their objectives.

The Joint Conflict and Tactical Simulation (JCATS), a constructive simulation, and the Virtual Reality Scene Generator (VRSG), a 3D virtual visualization system, were the ideal tools for executing and visualizing the different TTPs that 1AD developed. JCATS is an entity level simulation and has the ability to model individual soldiers and floors within a building and multiple rooms within a floor.

Figure 1 provides an example of the high level of detail that JCATS is capable of portraying. The JCATS image shows the floor plan of the Presidential Palace.

VRSG is a visualization tool that provides the user the ability to view objects , personnel, equipment and terrain features in a 3D view that is correlated with the JCATS simulation. The VRSG image of the Presidential Palace that corresponds to the JCATS image in Figure 1 is shown in Figure 2.

Without the appropriate terrain databases, the JCATS and VRSG simulation tools would be of limited use for the 1AD. In the spring of 2002, in anticipation of possible training and operations support requirements, the 7th ATC digital terrain lab (TerraSIM) started to collect and archive all relevant National Imagery and Mapping Agency (NIMA) and commercial digital terrain that were available over Iraq. The data, and both classified and unclassified satellite imagery,
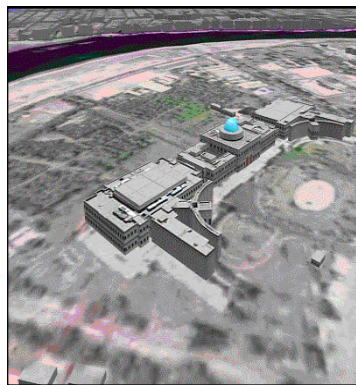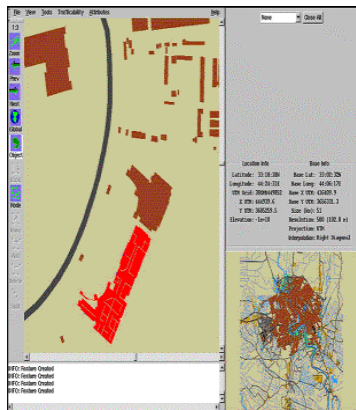
USAREUR Con't

paramount to the development of high fidelity correlated terrain databases for JCATS, VRSG, and Vision XXI (a tool used for After Action Reviews). The correlated terrain databases provided a simulated terrain that was correct (had all the actual terrain features) and accurate (those matching the terrain down to each individual building to include all streets and blocks within build-up areas. This enabled 1AD to develop TTPs in JCATS and simultaneously view them in VRSG.

With all the tools necessary to run the event, after completing an abbreviated test of the simulation, all that was left to do was assign trained personnel to run the simulation and command the OPFOR. Due to the intricate nature of Urban Operations, Northrop Grumman Information Technology (NGIT) contractors, vice military personnel, were used as simulation workstation operators and interacted with JCATS and VRSG. They translated the tactical orders from the 1AD into commands that were executed in JCATS. NGIT senior software engineers were also responsible for providing technical support for the simulations during Urban Seminar.

 The Warrior Preparation Center (WPC) OPFOR was the final building block for the exercise. They provided excellent support and replicated realistic OPFOR behaviors and demonstrated to 1AD different tactics that the OPFOR would use in a complex urban environment so that 1AD could make appropriate adjustments to their TTPs.

Prior to the start of the seminar, the workstation operators attended the brigade operations order brief and discussed tactics with subject matter expert to gain an appreciation of the operation that was to be executed. 1AD executed three simulation runs of a brigade level vignette with a cooperating OPFOR, but with free play engagements. Throughout the execution, the VRSG operator followed guidance from the seminar team intelligence representative and provided a "God's eye" of the battlefield.
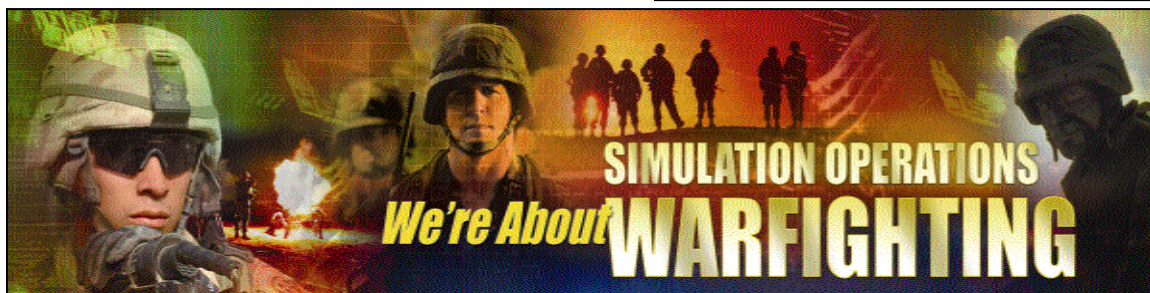
After the seminar, the DOS provided 1AD the ability to rerun the entire event in JCATS and to demonstrate the TTPs and lessons learned from the Urban Seminar. Specifically, the CDs contained JCATS scenario files, JCATS analyst workstation files, JCATS technical replay files, recorded protocol data units (so the event could be replayed), 3D snapshots and video clips from VRSG, screen shots from Vision XXI and JCATS, and Vision XXI scenario, database, and configuration files.
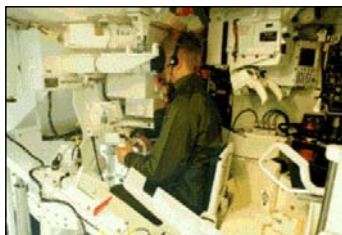
The huge success of this initial event convinced 1AD leadership to push this training down to all of their brigade and battalion level units. The event was considered so successful that V Corps Commander called together the brigade level commanders of the ground force, Marines included, to be briefed on what the 1st Armored Division had learned. The DOS team is taking the next step and is in the process of developing an urban operations training support package (TSP) that will be distributed Army wide so that all Army units can take advantage of the efforts of 1AD and the DOS to train and educate soldiers on the complexities of operating in an urban environment.

- Directorate of USAREUR Simulations

"Before I deployed the Corps from Germany, I had some of the troops from the 1st Armored Division, as a matter of fact, do some simulation work with a simulation called JCATS, which is a very high resolution simulation that can be used to simulate urban combat. And what they investigated over the course of five days was possible ways to conduct urban combat with armored formations. And one of the techniques the investigated was the idea of doing armored raids into urban areas."

"We Fight As We Train" - USFK

We fight as we train." This truism has been with military forces since military forces operated as organized bodies. Not surprisingly, those military organizations that are the most effective in training are those that habitually do the best in combat operations. Training has long been known to be a force multiplier as evidenced by the multitude of examples where the highly trained, but vastly outnumbered, inflicted decisive defeats on their opponents.

But the experiences passed to us through history also show that getting everyone trained to sufficient degree is difficult – particularly in coalitions. We, and this "we" is both ourselves and our coalition partners – a much larger set of entities than our formal allies – need to train together. Not only does doing so enhance effectiveness, preclude misadventure, and reduce losses, but the knowledge of our effectively doing so by our actual and potential opponents serves

to aid deterrence.
But such training is vast, expensive and difficult in the "live" training mode. Whether one examines the basics of fuel and wear and tear on vehicles and equipment, the ecological impact (and resulting political fallout), or the inherent dangers associated with certain battlefield environments, the blunt answer is modeling and simulation (M&S) applications must be used. Indeed, US forces of every Service are inseparably wedded to the use of M&S at virtually every level of military training. Yet, America's allies (notably much further advanced in M&S than the larger set of possible coalition partners) are not nearly in step with US M&S applications.

Various existing simulations have limited processing capabilities and/or an inability to easily represent emerging systems or operational concepts. Vexing in "US Only" play, these problems can generate frictions of a different character when training occurs with allies or coalition partners. Obviously, all military organizations want their elements fully, completely and accurately represented. With more entities needing representation than the maximum level of representations the simulation can handle, some elements simply cannot be accommodated. No single solution can completely please all participants.

Significantly, many of America's potential partners cannot develop sophisticated M&S applications. The costs, infrastructure and maintenance requirements are simply beyond their capabilities. Thus, they depend on the US – not simply for the M&S applications but also for the associated results of those applications in doctrine, Research & Development, manpower, and acquisition.

Simply, we need our allies – and they need us. And to accomplish our missions, America needs to stay abreast of the latest technological developments in our M&S associated training to ensure the most effective operations by ourselves, our allies and our coalition partners.

- Dr. Warren Switzer
Korea Battle Simulation
Center (KBSC) LNO

Getting everyone trained to sufficient degree is difficult – particularly in coalitions.

Existing simulations have limited processing capabilities and/or an inability to easily represent emerging systems or operational concepts.

Stay abreast of the latest technological developments in M&S associated training to ensure the most effective operations by ourselves, our allies and our coalition partners.

Simulations & Modeling for Acquisition, Requirements and Training (SMART) Conference

The 2003 Army SMART Conference, co-hosted by AMSO and TARDEC, was a huge success. Taking place 8-11 September 2003 in Dearborn, MI, the Conference served to sharpen the focus of our military, civilian and industry M&S professionals for the challenges ahead. The stakes are huge. Attendees at this Conference were, for the most part, the same people who will determine success or failure in the Army's upcoming Future Combat Systems (FCS) Milestone C and follow-on efforts to field the Future Force. SMART is crucial to these efforts and especially important to our achieving leadership objectives to field initial FCS operational capabilities by the end of this decade. Army leadership emphasized repeatedly that, while our understanding of SMART is improving, our top priority going forward is to teach Army organizations to successfully apply SMART to the way we do business. Attendees got to hear first-hand from most of the Army leadership engaged in fielding the FCS, as well as various industry leaders. Overall, attendees got a close-up perspective of how the Army and industry are applying some of the foundational tenets of SMART to their advantage. One example, made even more relevant by the Detroit setting of this year's Conference, is the importance of robust collaboration.

The Advanced Collaborative Environment (ACE) was described by Dr. Grace Bochenak and others in great detail and was rightly a dominant theme for this year's Conference. Picture the traditional "clay model" of auto industry lore as a digital model. Instead of using "clay" to enable collaboration and "what-if" analysis by all stakeholders "in the room", we now use "electrons" to enable collaboration by a universe of stakeholders -- limited only by their ability to gain access to the Internet.   We use M&S to discover "the better mousetrap" BEFORE "bending metal." SMART is more than just M&S and is used in areas other than acquisition. Trainers and analysts must also employ the tenets of SMART to enhance Army training and analysis. M&S is key to making SMART work, but the VALUE of SMART increases exponentially as we leverage existing information technologies to provide ALL Stakeholders with early opportunities to collaborate.

Visit AMSO's SMART Team web site at: http://www.amso.army.mil/SmartTeam/ for Conference slide presentations, technical papers and other information that includes our growing collection of Lessons Learned and on-line Tutorials intended to aid the Army in applying the tenets of SMART to the way we do business.

<div align="right">- Mr. George Harris
SMART Action Officer</div>

> *The Conference served to sharpen the focus of our military, civilian and industry M&S professionals for the challenges ahead.*

Government Civilians Can Attend the SOC!

The Simulation Operations Proponent Office has designated spaces available for DA Civilians to attend the next Simulations Operations Course, which will be held from January 5, 2004 through February 13, 2004, at Ft. Belvoir, Virginia. The priority of attendance is given to officers qualifying for Functional Area 57 first, then to other military and civilian personnel. Army civilian personnel GS 7-15 may attend this course, subject to approval by the Proponent Office.

The Simulation Operations Course provides individuals with an understanding of the roles, responsibilities, practices, procedures, and concepts necessary to integrate models and simulations. The curriculum emphasizes the following topics:

- Fundamental knowledge of modeling and simulation

- Creating models and simulations

- Applying models and simulations to a military environment

- Integrating models and simulations with unit training programs

- Evaluating and modifying models and simulations; and future simulation issues

The Simulation Operations Course will enable students to:

- Provide advice on Army model and simulation systems to the training and operational communities, focusing on the integration of simulations into training for mission requirements

- Provide planning, preparing, supervising, and executing events, experiments, and exercises supported by models and simulations

- Provide management in the developing, fielding, and maintaining models and simulations

- Participate in the development, equipping, and maintenance of simulation product repositories and interoperability standards development.

Anyone would like more information, should contact the course POC Dr. Edward Degnan, who may be reached at

deganej@hqda.army.mil,

DSN 664-0234, or COM 703-604-0234, or alternative POC Tom Lineer,

thomas.lineer@hqda.army.mil,

DSN 664-0258, or COM 703-604-0258. Administrative instructions will be provided upon acceptance into the course. <http://www.fa-57.army.mil/careers/military/admin_jan03.shtml>

Attendance applications should be submitted (in memo format with the information contained in the following sentence) with an endorsement from the individual's organization NLT December 5, 2003 to Dr. Edward Degnan. Organizations should submit the name of the individual, duty position title, duty functions, and justification for the individual's attendance at this course.

- Dr. Thomas Lineer
Civilian Programs
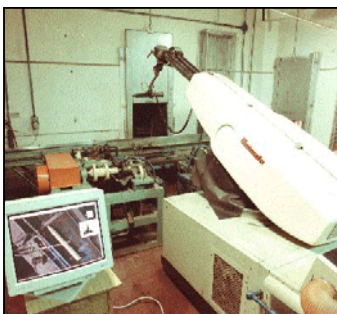
OneSAF

The OneSAF Program Office http://www.onesaf.org/ is responsible for two products: OneSAF Testbed Baseline (OTB) and OneSAF Objective System (OOS). Used in hundreds of locations around the Army and DoD, OTB is a current, entity-level Semi-Automated Forces (SAF) simulation for battalion and below combat modeling. OOS is a composable, next generation, entity-level SAF simulation for brigade and below combat modeling. OSS will represent a full range of operations, systems, and control processes from entity up to brigade level, with variable level of fidelity that supports multiple Army M&S domain (ACR, RDA, TEMO) applications. OOS is not just the next version of OTB; it is a completely re-architected simulation that will provide leap-ahead capabilities in MOUT, fidelity and flexibility in physical representation, validated automated behaviors, representation of the synthetic natural environment, composability, and change management.

A SAF is a constructive simulation in which the entities (in this case individual soldiers and platforms) exhibit limited autonomy. Rather than "pucking" the actions of every entity, SAF squads, platoons, and companies can be assigned tasks like "clear a room," "move by traveling overwatch," "conduct support by fire," etc. In most simulation exercises, the workstation operators are not the training audience, just overhead. A SAF helps reduce the overhead to run an exercise or experiment. The Army has developed many SAFs over the past 15 years. The OneSAF program was created to build a single SAF capable of replacing all others. This was done to reduce the logistics tail associated with maintaining many SAFs that have similar capabilities.

Best practices from commercial software development were used to develop OOS, to include spiral development, an implementation of "extreme programming," heavy reliance on open standards and open interfaces, platform independent code (OOS runs on Solaris, Linux, and Windows 2000), and data storage and exchange through the use of the eXtensible Markup Language (XML). OOS development was built around four (roughly annual) blocks. Each block is further divided into eight-week builds. Block B of OOS is currently undergoing block release testing; Block B will be distributed to selected "beta sites" in the second quarter of FY04. While Block B is going though its test paces, Block C development has already commenced and will be completed the second quarter of FY05. OneSAF fielding will begin 1st quarter FY 2006 to National Guard armories, reserve training centers, all active duty brigades, battalions, and international customers.
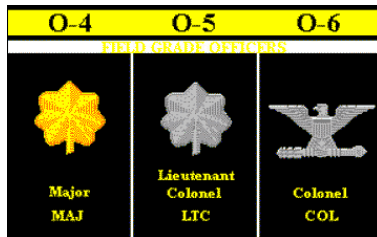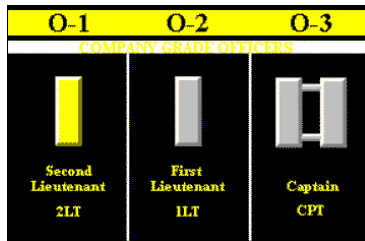
- LTC John R. "Buck" Surdu, Ph.D.
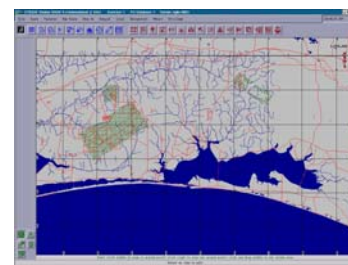
Persons wishing to provide comments on this Quarterly or submit articles for future Quarterlies should contact MAJ Favio Lopez at:

HQDA
Office of the Deputy Chief of Staff, G3
Simulation Operations Proponent
400 Army Pentagon
Washington, DC 20310-0400

Comm: 703-604-0257
DSN: 329-0257
Email: favio.lopez@hqda.army.mil

Selection Boards

As we go into the holidays, officers' two greatest concerns on the personnel side are the upcoming summer moves and the approaching board season. All of the current positions available to the FA 57s that are moving are available for review on the website. Just go to the main page (https://www. perscomonline.army.mil/ opfamio/FA%2057/fa57.htm) and click on the "Assignments" tab on the right side. Officers who are available to move between 1 May and 1 Sep 04 will fill all of these positions. I need all officers to give me a preference statement listing their top 5 choices NLT 8 December 03. I will take those preferences and each officer's background to find the best officer to meet the Army's needs. A detailed look at that process can be found on the Assignments page.

The board season will begin with the LTC Army board, 24 Feb-26 Mar 04. The zone of consideration will be announced shortly, but all MAJs in Year Group 88 will be considered in the primary zone with more senior Majors seen Above Zone and YG 89 officer Below Zone. The Senior Service College board will meet 6-30 Apr 04 with all LTCs having up to 276 months of active commissioned service being considered. The MAJ Army board will meet 13 Apr-13 May. These FADed FA 57 captains will have to work with their basic branches to prepare for the board.

When preparing for the board, remember that the board members only get to see three or four documents upon which to base their decision. It is worth the investment in time and energy to make sure these items are straight. They are your photo, your ORB, your "fiche" and any letters you submit before the board. You can review all three of the source documents from links on my web site. Your photo should be current (less than 2 years old) and, as a minimum, should show you at your current rank. The information on your ORB should be correct. If there are any problems, missing awards, tour dates are not correct, etc, you need to see your PSC to get it fixed. They can also print out a board ORB for you to mail into me. Make sure to check the dates of your security clearance, photo, last OER, and physical. The last item to review is your Official Military Personnel File. When you review your OMPF online, check to ensure all OERs are in your file, as well as any award orders and certificates. (Especially critical are Meritorious Service Medal award orders and higher.) Current OERs (within 6 months) that are not on your fiche, but have been processed by PERSCOM, will be seen in hard copy by the board. Call the OER hot line at Commercial (703)-325-2637 (DSN is 221) to ensure they received your most recent OER. If you are missing an OER on OMPF that is more than 6 months old, alert me. Lastly, make sure these three documents are in agreement. If you have two MSMs in your photo make sure they appear on your OMPF. Your PSC will help you make the changes to these documents.

If you need to send correspon-dence to the President of the Board, it must be received before the board convenes. Send to the enclosed address and NOT to Branch!!! This correspondence is personal between you and the board president. If there is correspondence written on your behalf by someone else, it must be sent by you with a cover letter from you authorizing the board to see it. It is important to review the tone of any letters you send to the board. The address to send these to is:

Board President:
President, FY04 Lieutenant Colonel
Army Competitive Category Senior Service College Selection Board
ATTN: TAPC-MSB
200 Stovall Street
Alexandria, VA. 22332-0441

The good news is that we, as 57s, have done very well before the centralized boards over the past two years. This is due to the strength of our officers. Make the effort now to get ready for these boards. If there are any questions, please call me.

- Major Brian Bedell
Army Simulation Operations (FA 57) Career Mgr
Voice: DSN 221-8635
COM: (703) 325-8635
FAX: DSN 221-0068
COM: (703) 325-0068
Commander, U. S. Army Human Resources Command
AHRC-OPF-A (Attn: MAJ Bedell, FA 57)
200 Stovall Street
Alexandria VA 22332-0411

LTC ARMY / MAJ SELCO, 24 FEB - 26 MAR 04

FA 57—"It's About Warfighting"

The phrase above encapsulates the three things that FA57s do: Training, Simulations and Military Operations. Today our functional area is a reality and no longer a concept plan. The truly good news story is that every week the Proponent Office gets a request for an FA57. A Division Chief of Staff recently wrote and stated, "We will work hard to justify our requirement for one of these high speed FA 57 officers. We strongly believe that an assignment here for one of these heroes is critical to our success."   As an indication of the work you have done, our promotion rates are at or above the Army average, and more importantly, our officers are being selected for senior service schools. Two points I want to discuss include: what our role is in military operations and what the Proponent Office is doing to address that specific issue.

The Army is at war and for the foreseeable future we, as FA57 officers, will be both part of the operational force that deploys forward and the generating force that provides training solutions or, more importantly, reach back capabilities for forward deployed forces. Many of you have been monitoring the email traffic on the reflector and much of the debate has centered on the role of the FA57 during military operations and the tools that they have. This is an important issue that will be addressed at the Executive Panel discussion in December. Based on that discussion, a working group will address the issues and provide recommendations back to the Proponent Office. In addition to the establishment of working groups, the Proponent Office is looking at conducting at least two additional meetings per year. This is a tentative plan, but with your feedback and thoughts on the subject we hope to make it a reality.

As we look to the future, understand that we need your help, ideas and suggestions. I look forward to seeing you in your foxholes soon and remember that our reputation is great because of the work and contributions "you," the FA57, are making on a daily basis to our Army.

> - MAJ Favio Lopez
> Proponent Officer

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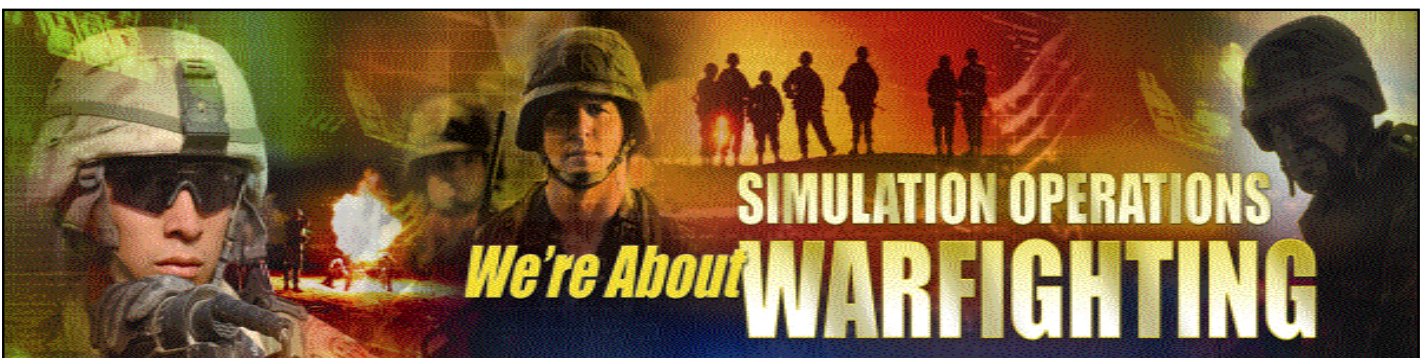
FA57 Force Structure Changes

Functional Area (FA) 57, Simulation Operations is doubling in size! Two fiscal years ago, we had 167 total authorizations. In FY05, we project 387 total authorizations! This is unprecedented in the force structure business. But just how do these numbers break out, what caused this increase and where exactly are these positions?

From FY02 to FY05, the active Army is increasing from 96 to 184 authorizations; the Army National Guard is growing from 7 to 107 authorizations; and the US Army Reserve is increasing from 64 to 96 authorizations.

The majority of these increases are the result of an Army Chief of Staff decision in November 2002, and an Army G3 directive in March 2003, to document FA57 positions in Corps level Separate Brigades or equivalent level Headquarters. Predominantly, these positions are Assistant S3/G3 Operations Officers. The majority of these positions are re-coded from the basic branch associated with the Brigade to Simulation Operations.

Significant active Army force structure increases occurred with the re-coding of basic branch officers in the headquarters of five Aviation Brigades or Groups, eight Field Artillery Corps HHB's or FA Brigades, five Air Defense Artillery and five Engineer Brigades or Groups, and ten Corps Support Command or Corps Support Group Headquarters. Other increases were the addition of FA57 authori-

zations in the 75th Ranger Regiment; the 2d, 3rd and 11th Armored Cavalry Regiments; the Enhanced and Separate Brigades of the Army National Guard; and, multiple Corps Support planning cells in the US Army Reserve.

What we are witnessing is a significant shift in our force structure. We are rapidly moving from a preponderance of TDA authorizations in support of the institutional Army to one comprised of warfighters in and organic to "go to war" MTOE units. Last year, we had only 31 total MTOE authorizations; next year, we will have 216 total MTOE authorizations! In the active Army, we are going from 22 to 64 MTOE authorizations; the Army National Guard is increasing from 8 to 107 MTOE positions; and, the US Army Reserve grows from a single MTOE authorization to 45 MTOE positions.

Significant force structure increases are evident by MACOM as well. FORSCOM is increasing from 15 FA57 authorizations in FY02 to 57 FA57 authorizations in FY05, and USAREUR is going from 8 FA57 authorizations in FY02 to 22 in FY05. We will continue to have a strong FA57 presence in TRADOC, growing from 29 FA57 authorizations in FY02 to 53 in FY05. Our Joint billets will decline slightly, 25 FA57 authorizations in FY02 reducing to 21 FA57 billets in FY05, but we remain positioned at key Combatant Command Joint and Unified Headquarters.

Also of significance is the FY05 introduction of the S7, Simulation Operations Officer Skill Identifier (SI) for S3 Operations Officers and Assistant S3 Operations Officers (or equivalent) in the Battalion and Brigade Headquarters of F-Edition TOE digital Divisions and Stryker Brigades. In FY05, 172 positions in the 1st Cavalry Division, the 4th Infantry Division (Mechanized), the 1st Brigade/25th Infantry Division (Light), the 3rd Brigade/2d Infantry Division, and the 172d Infantry Brigade (Separate), and 14 positions in the 56th Brigade/28th Infantry Division (Mechanized) (ARNG) will be documented with the S7 SI.

So, what does the future hold beyond FY05? We are pursuing initiatives in the active Army to "right size the pyramid" for numbers of positions by grade. Our rapid growth has left us short 16 COL/O6 and 16 LTC/O5 authorizations from the OPMS III design. We are redressing those shortfalls through a phased, incremental approach by increasing authorizations in these ranks/grades over the next four years. This will include recoding approximately four to five TDA authorizations per rank/grade, per year at MACOM Headquarters, Joint and Unified Commands, and other select organizations, until we correct these inequities. We will also look at expanding the application of the S7 SI to units other than the current, heavy digital force.

> - Mr. John Hammond
> Force Structure Analyst

From FY02 to FY05, the active Army is increasing from 96 to 184 authorizations; the Army National Guard is growing from 7 to 107 authorizations; and the US Army Reserve is increasing from 64 to 96 authorizations.

GEN Peter J. Schoomaker
Chief of Staff, Army

WARRIOR ETHOS
Soldier's Creed
I am an American Soldier.
I am a Warrior and a member of a team. I serve the people of the United States and live the Army Values.
I will always place the mission first.
I will never accept defeat.
I will never quit.
I will never leave a fallen comrade.
I am disciplined, physically and mentally tough, trained and proficient in my warrior tasks and drills. I always maintain my arms, my equipment and myself.
I am an expert and I am a professional.
I stand ready to deploy, engage, and destroy the enemies of the United States of America in close combat.
I am a guardian of freedom and the American way of life.
I am an American Soldier.

THIS QUARTERLY IS PUBISHED BY THE SIMULATION OPERATIONS PROPONENT OFFICE

It's About Warfighting

Calendar of Events 2003—2004

EVENT	DATE	LOCATION
I/ITSEC	1-4 Dec 03	Orlando, FL
Sim Opns Professional Course	8-19 Dec 03	KBSC, Seoul, S. Korea
Sim Opns Course	5 Jan-13 Feb 04	Ft. Belvoir, VA
AUSA Winter Symposium	3-5 Mar 04	Ft. Lauderdale, FL
Armor Conference	22-27 May 04	Ft. Knox, KY
Sim Opns Course	14 Jun-23 Jul 04	Ft. Belvoir, VA
Infantry Conference	6-9 Sep 04	Ft. Benning, GA
AUSA Convention	25-27 Oct 04	Washington, DC